

CLAIMS

1. A compound semiconductor epitaxial substrate comprising a substrate, and a sub-collector layer, a collector layer, a base layer, an emitter layer and a contact layer(s) formed in this order on said substrate, said compound semiconductor epitaxial substrate having an oxygen-containing layer between said substrate and said sub-collector layer.
2. The compound semiconductor epitaxial substrate according to Claim 1, wherein said oxygen-containing layer is an $\text{Al}_x\text{Ga}_{1-x}\text{As}$ ($0 \leq x \leq 1$) layer.
3. The compound semiconductor epitaxial substrate according to Claim 2, wherein said oxygen-containing layer has an oxygen concentration of $1 \times 10^{16} \text{ cm}^{-3}$ or more.
4. The compound semiconductor epitaxial substrate according to Claim 2, wherein said oxygen-containing layer has an oxygen concentration of $1 \times 10^{16} \text{ cm}^{-3}$ or more and $1 \times 10^{21} \text{ cm}^{-3}$ or less.